



Q&A Follow-up Information

ICO Creekside – Cottonwood Heights

August 2018

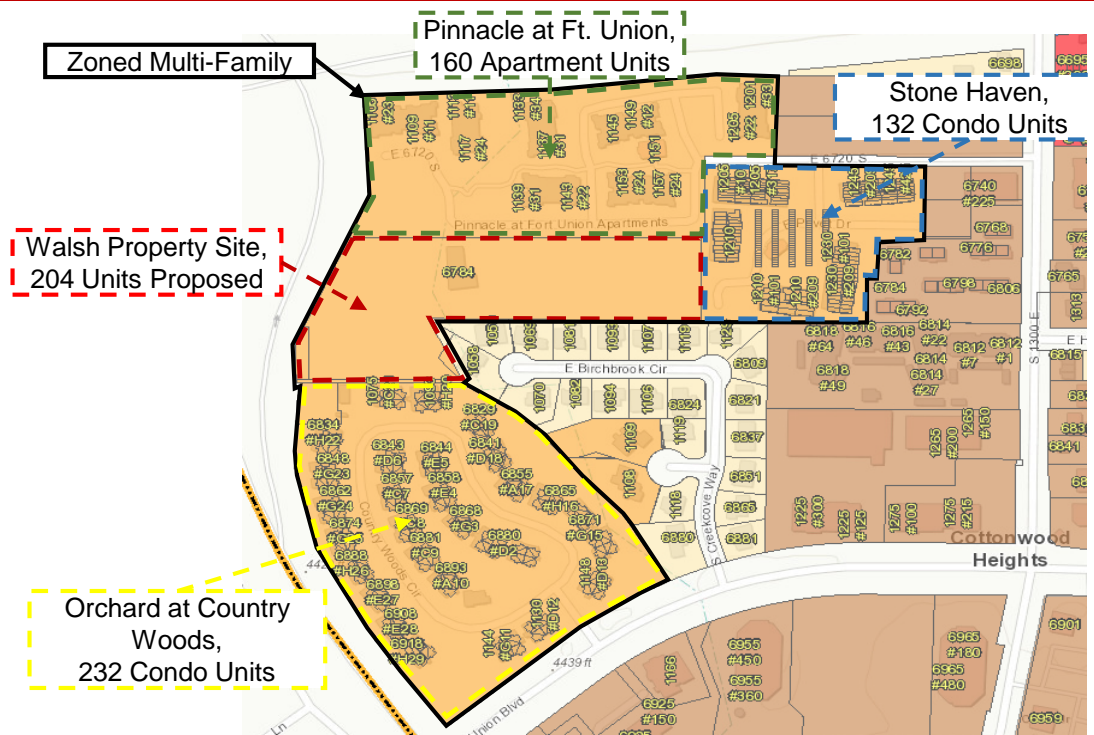
PURPOSE OF THIS DOCUMENT

- Following the last Planning Commission meeting on July 11, 2018, the Planning Commission requested that the developer address specific questions raised in that meeting.
- This document addresses these remaining issues which include:
 - Building setbacks, specifically to multi-family neighbors on the south property line at The Orchard of Country Woods.
 - Follow-up from ICO's meeting with an arborist covering the extent to which trees on the site can be preserved.
 - Updates to the Hales Engineering traffic report, including weekend traffic counts and street width details.
 - Live work units and the flexibility of uses between floors.
 - Age restrictions for senior housing units.
 - Detail on the photometric study and proposed lighting for the community.
 - Detail on building height and components of living space, structural space, and architectural elements.

PROPOSED DEVELOPMENT CONTEXT AND NEIGHBORING COMMUNITY UNIT COUNTS

- **The zoning request meets and is consistent with the City's Master Plan.**
 - Cottonwood Height's Master Plan designates the site for long term use as high density multi-family.
- The application and development plan meets and in many cases exceed s19.51 Planned Development District requirements.
 - The proposed development has 204 units with 295 bedrooms, with ~34 dwelling units / AC (19.51.060).
 - Building height of 50' excluding architectural appurtenances (19.51.060.B.3a).
 - Setbacks meeting and exceeding requirements for single-family and multi-family condo neighbors (19.51.060.B.4a).
 - Parking, lighting, live-work units, and senior housing per the requirements of 19.51.060.B.
- The surrounding developments have a total 524 condo and apartment units as shown below.

Proposed Site and Surrounding Area, Zoning and Unit Counts by Development

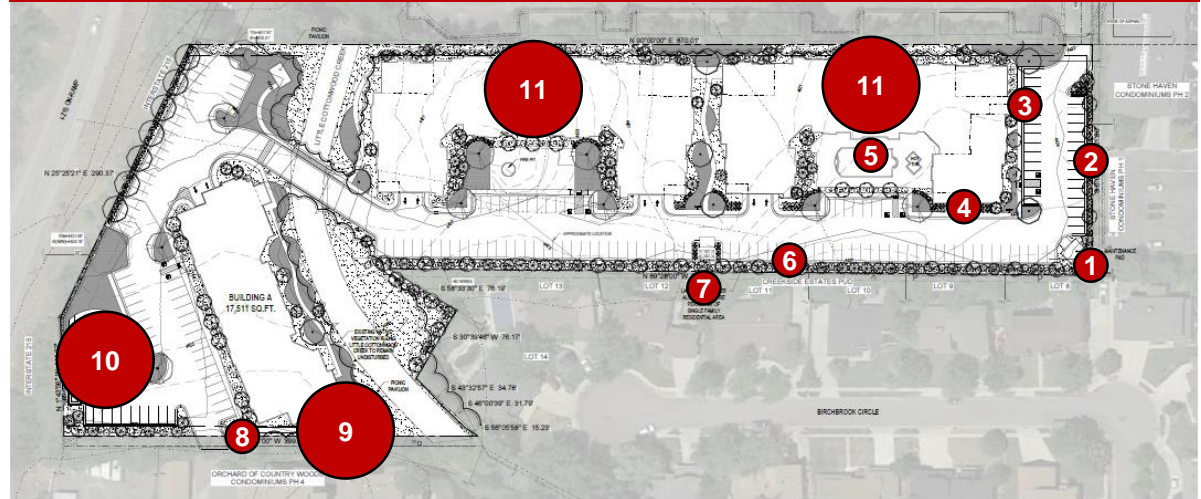


DEVELOPER HAS MADE SIGNIFICANT SITE PLAN ADJUSTMENTS BASED ON PUBLIC FEEDBACK

- ICO held three community workshops to ensure neighboring residents could provide input. In response to feedback from both Cottonwood Heights City and residents in the communities surrounding the proposed development, eleven significant adjustments, all to benefit adjacent land owners and at significant cost to the developer, have been made to the original development plan and landscaping designs. The images below set forth the “before” and “after” landscaping plan, with changes highlighted:

- 1 Doubled densely vegetated buffer from 10' to 20' to provide single family homes more privacy
- 2 Upgraded fencing material from see-through wrought iron to 6' solid vinyl
- 3 Added planter boxes to front façade of building to enhance feel of separation from front parking spaces
- 4 Decreased wing length of buildings A & B to increase setback from single family homes to provide more privacy
- 5 Increased vegetation between pool and parking to provide sound buffer; also enhanced landscaping in Building B courtyard for additional sound dampening
- 6 Changed plant selection to include blue spruce for year-round privacy along back yard fences for single family neighbors; 30-50' mature height
- 7 Moved garbage dumpster from middle of south parking area to west end of south parking to reduce potential dumpster noise
- 8 Added blue spruce along south property line shared with Orchard of Country Woods to enhance privacy for condo building to the south
- 9 Redesigned Building C to increase setback by 150% to enhance privacy of multi-family neighbors in condos to the south
- 10 Added full emergency vehicle turnaround
- 11 Proposed increased sprinkler and water access density for fire teams to enhance resident safety

Original ICO Proposal:

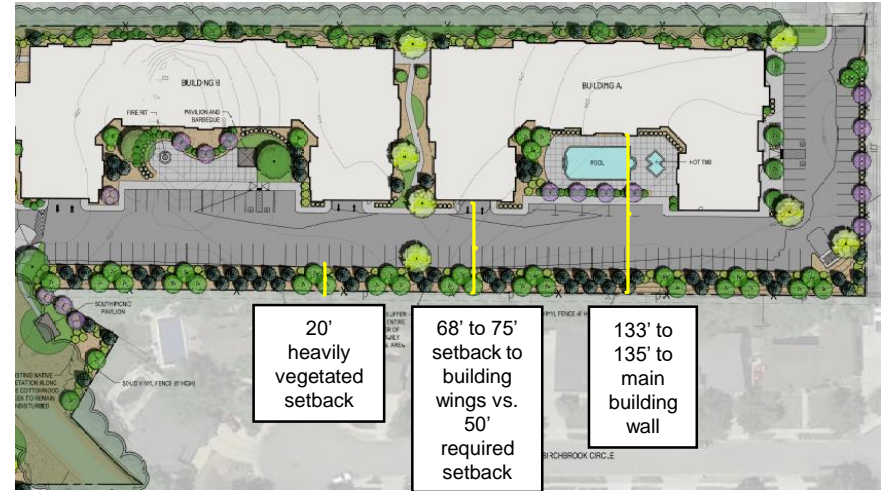


Revised ICO Proposal Incorporating Feedback:

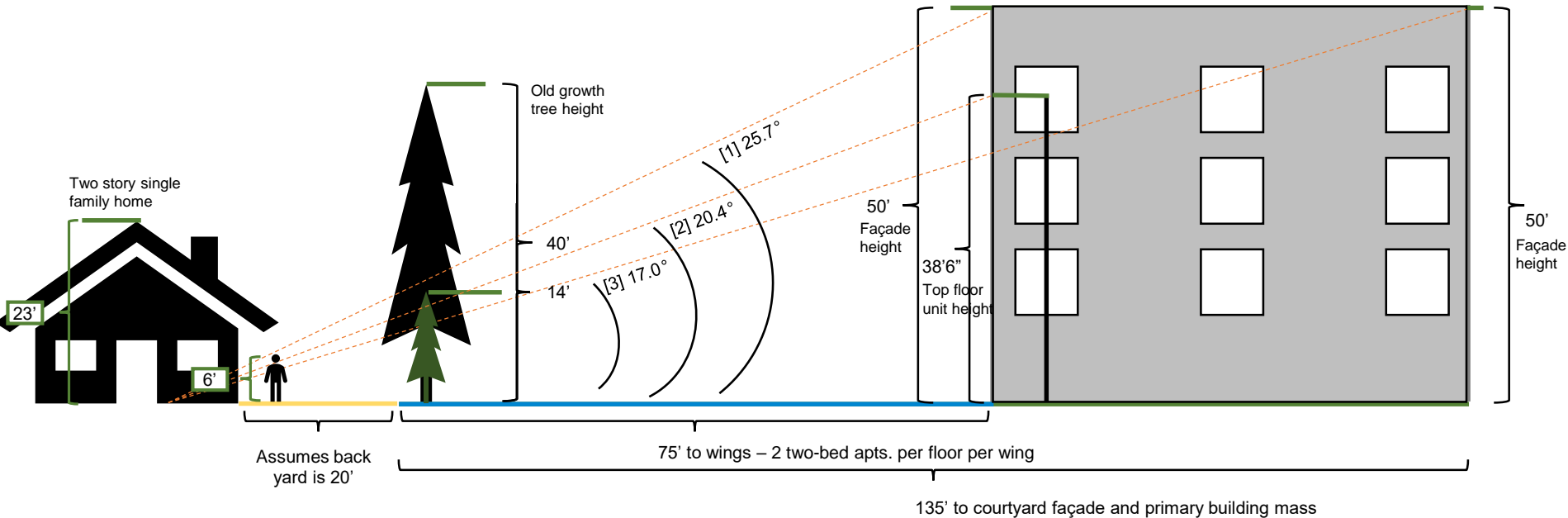


BUILDING HEIGHT RELATIVE TO SINGLE FAMILY HOMES

- Previously ICO presented the illustrations to the right and below for two purposes:
 - To highlight that the proposed building setback is an increase of 50% over code requirements (75' setback from single family homes vs. 50' zoning requirement).
 - To show the viewing angles were for residents of single family residents, which are better than the 2:1 ratio suggested by the Planning Commission.
- ICO prepared the same analysis using zoning for the Residential Multifamily Zone to illustrate the benefit of its proposal vs. other types of zoning that could be used for this parcel.



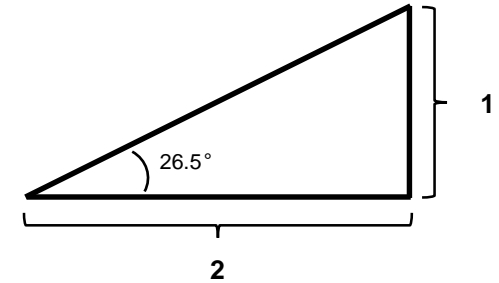
Single Family Neighbor Setback Detail



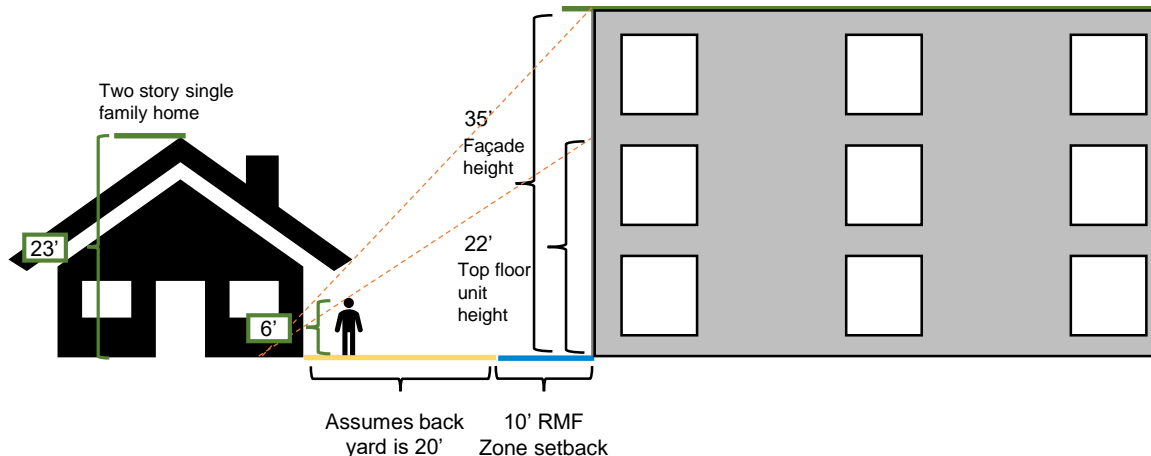
BUILDING HEIGHT RELATIVE TO SINGLE FAMILY HOMES – RMF ZONE

- The illustration below shows building height allowed of the Residential Multi-Family Zone (35') with minimum setback (10' as long as shared yards are a minimum 25'). Using this zoning is an administrative approval (not legislative like the PDD zone).
- The viewing angle for residents of the single family homes is much worse than what is provided in ICO's application
 - The single family viewing angle to the top corner of a 35' façade which would be allowable under RMF code development would likely be $\sim 45^\circ$
 - The single family viewing angle to the top floor of a RMF code development would likely be $\sim 32^\circ$
- The comparable viewing angles from the proposed ICO setbacks are significantly better than those provided in the RMF zone (an improvement of $\sim 19.3^\circ$ for the façade height angle and $\sim 11.8^\circ$ for the top floor angle).
- If ICO is unable to get approval for this project, other developers will seek to understand why and it is possible that another developer could seek to use RMF zoning, which Planning Commission has little ability to influence if the development meets code minimums.

Illustrative 2:1 Rule of Thumb



Single Family Neighbor Setback Detail



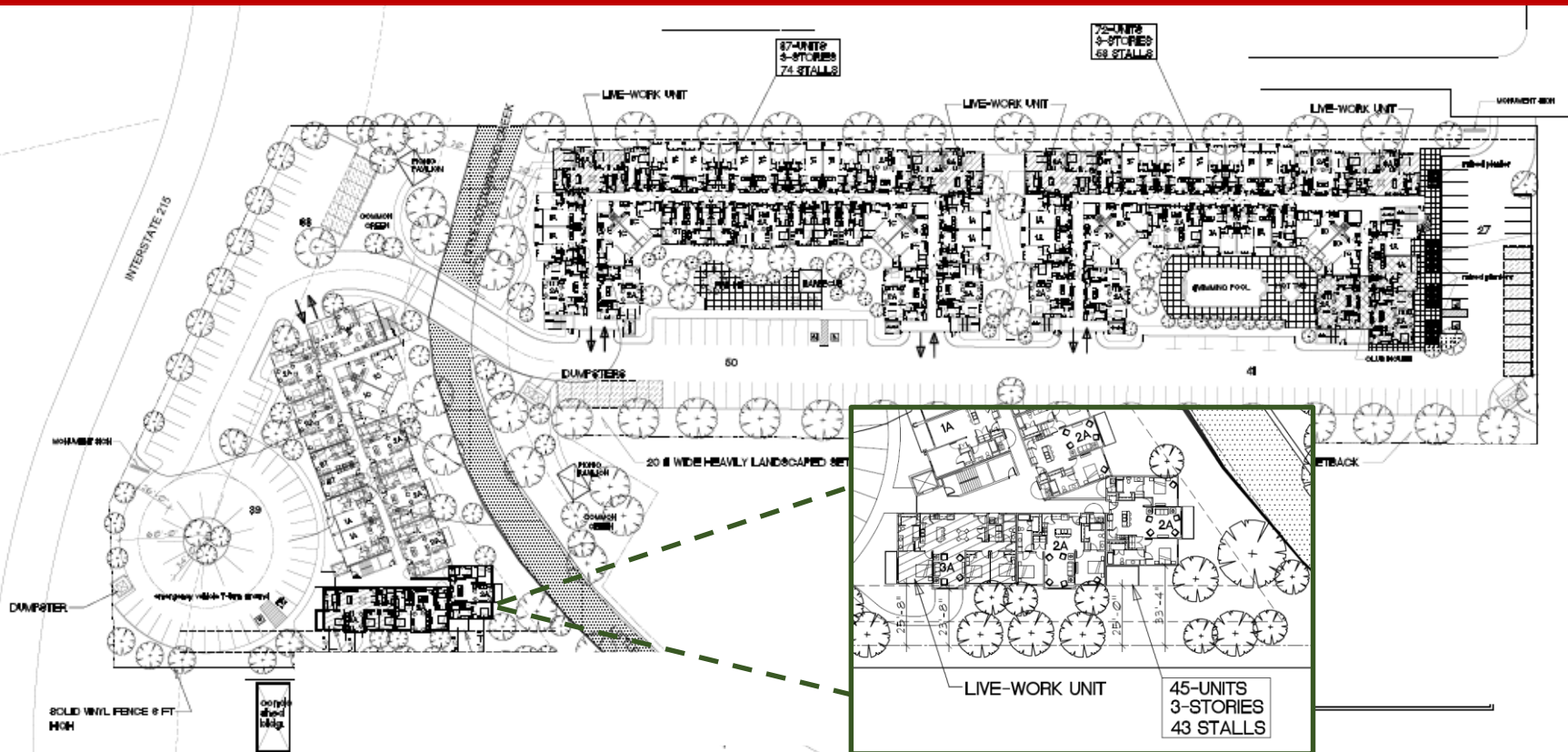
Viewing angles from single family perspective:

- To top floor unit height: 32.2°
- To top of façade: 45.0°

SITE PLAN UPDATE – BUILDING C (CHANGE ITEM #9)

- In the previous Planning Commission session, ICO was asked to re-evaluate Building C to see if setbacks or building height could be adjusted to accommodate condo owners and renters in the neighboring multi-family community.
- After in-depth review of potential options, ICO ultimately engaged its architect to redesign Building C. Previously ICO had placed Building C at the minimum zoning setback of 10', and focused more on setbacks to single family neighbors.
 - The south end of Building C is now square with The Orchard of Country Woods' property line with a set back of >25' on average, a 150% increase from the previous proposal.
 - The new proposed setback averages >25', and when combined with the title gap of 9'-12' and the 12' setback of the existing Orchard's buildings, equates to an average separation between buildings of 47'.

Setback Detail – Orchard of Country Woods



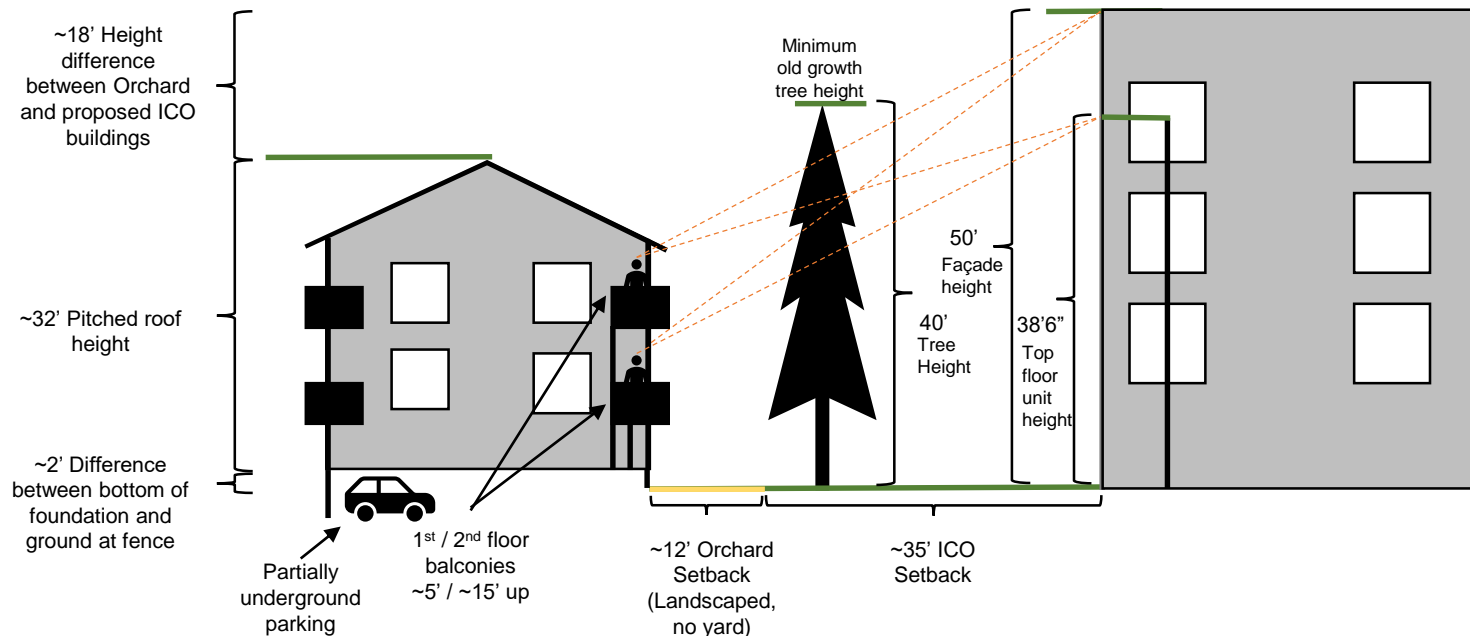
SITE PLAN UPDATE – BUILDING C SETBACK DETAIL (CHANGE ITEM #9 CONT'D)



BUILDING HEIGHT RELATIVE TO ORCHARD OF COUNTRY WOODS CONDOS

- The illustration below shows the heights of the Orchard of Country Wood buildings and proposed ICO Building C in scale (height).
 - Orchard buildings are ~32 feet tall.
 - The Orchard's buildings typically have between 6 and 8 units, with first floor balconies ~5 feet off the ground on the buildings' back side (the ground floor units are off the ground as parking is split level, with a portion of the parking garage below ground).
- The viewing angle from the balconies (there is no yard behind the buildings) are below:
 - From the first floor balcony to top floor unit height 33.8°; to façade height 42.4°.
 - From the second floor balcony to top floor unit height 24.5°; to façade height 35.1°.
 - These viewing angles have been significantly reduced as a result of ICO's collaborative working efforts with the Board of the Orchard at Country Woods.
- Old growth trees along the northern end of the Orchard's property line (southern end of the proposed site) are between 40 – 60' tall and provide a meaningful amount of privacy protection to residents of both multi-family communities.

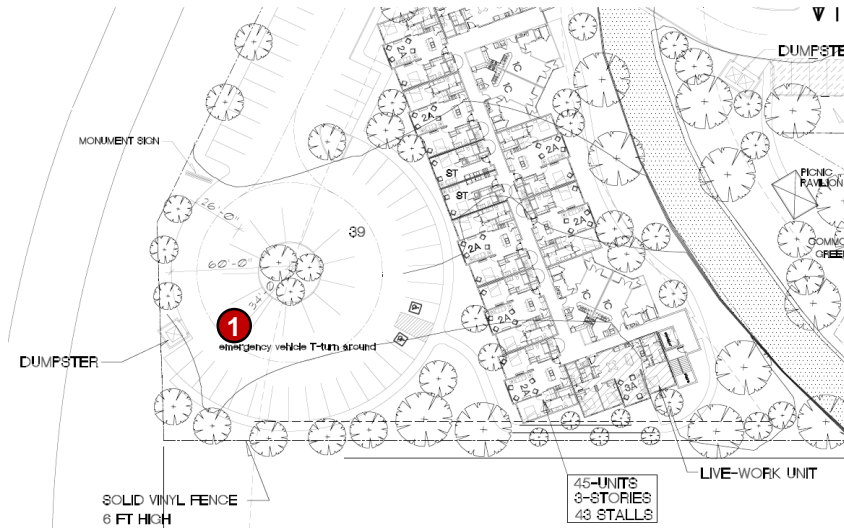
The Orchard of Country Woods Viewing Angle Detail



FIRE UPDATE FOLLOWING CBPE REPORT (CHANGE ITEMS #10 & #11)

- CBPE, Inc. produced a report recommending that with modest site plan adjustments, ICO's proposed site plan would meet fire code. As highlighted previously, the suggested changes include:
 - A full NFPA 13 fire system
 - Increased stand pipe density along the corridor spanning buildings A and B
 - Increased hydrant density along the corridor spanning buildings A and B
- As illustrated previously, the updated site plan reflects these changes with and include an emergency vehicle turnaround

Turnaround Only (Most Likely Outcome)



- 1 Full width turnaround loop for emergency vehicles
- 2 Secondary emergency access

- Despite ICO's best efforts to reach an agreement with the Orchard of Country Woods, it appears that the most likely path forward is to exclude the secondary emergency exit. As noted in the CBPE fire engineer report, the addition of the emergency turnaround precludes any requirements for a secondary access.

TREE PRESERVATION – UPDATE FOLLOWING ARBORIST VISIT

- ICO visited the site with an arborist to evaluate tree health and determine to what extent old growth trees may be able to be preserved.
- The arborist's opinion is that the vast majority of the trees will be able to be preserved; however, the arborist cannot guarantee the survival of any one tree.
 - The majority of the trees are box elder trees with some cottonwood, elm and ash interspersed. While box elder trees are generally considered a nuisance tree, they are very hardy and able to withstand a great deal more than other species of similar size.
- The arborist recommended that ICO use a 5 treatment fertilizer process to help the trees overcome the shock of earth being moved, roots cut, or pavement put down. The process includes two canopy fertilizations and three root injection fertilizations. The five injections span one year and additional treatments and be done in following years as needed.
 - Trees can survive dramatic changes, even if roots are cut or covered with pavement, as long as proper nutrition is provided throughout a transition period.
- ICO is developing a tree preservation program that will be a part of its agreement with The Orchard of Country Woods Condo Board. It is anticipated that this program will identify trees that will be part of the program, and should any of these trees not survive, suitable replacements, at the choice of the Orchard, will be planted.

Walsh South Property Line



REVISED TRAFFIC STUDY HIGHLIGHTS

- ICO engaged Hales Engineering to study additional aspects of traffic on 6720 South including an analysis of weekend traffic and street width.
 - Traffic was counted on a Sunday between 11:30am and 12:30pm which are considered peak hours due to the meeting schedule of the LDS chapel at 6710 South 1300 East.
 - Peak volume during this window was 58% lower than weekday evening peak hour volumes and operates at LOSA (best traffic flow rating).
 - There were a significant number of vehicles parked along either side of 6720 South, concentrated around the church building. Upon inspection there were approximately 45 empty stalls in the church parking lot, and it was assumed that many church attendees park on the street for convenience.
 - 6720 South is approximately 28' wide. When vehicles are parallel parked on either side of the street, the pavement width can be reduced to 19' or less, leaving travel lanes of less than 10'. Drivers in vehicles traveling in opposite directions would likely feel constrained navigating past one another on less than 20' of pavement and likely drive more slowly, creating a feel of congestion.
 - Where the road turns south toward Walsh Lane, the total paved width is approximately 25'. With vehicles parked on both sides of this portion of the street, pavement width is reduced to 15' or less. For drivers traveling in opposite directions, the condition would feel extremely congested, and it would be nearly impossible for two vehicles to navigate past one another.
- The traffic engineer recommends the city consider restricting on street parking to one side of the street along the east / west portion of the street. With vehicles on one side of the street, the available pavement width would be 25' or more, leaving 12' travel lanes. Church parking appears to not be fully utilized and could accommodate the reduced on-street parking.
- It is also recommended that the city consider restricting on-street parking on one or both sides of the north / south portion of the roadway. A restriction on only one side of this segment would leave approximately 20' of available pavement width, which is narrower than typically desired, but would accommodate bi-directional travel.

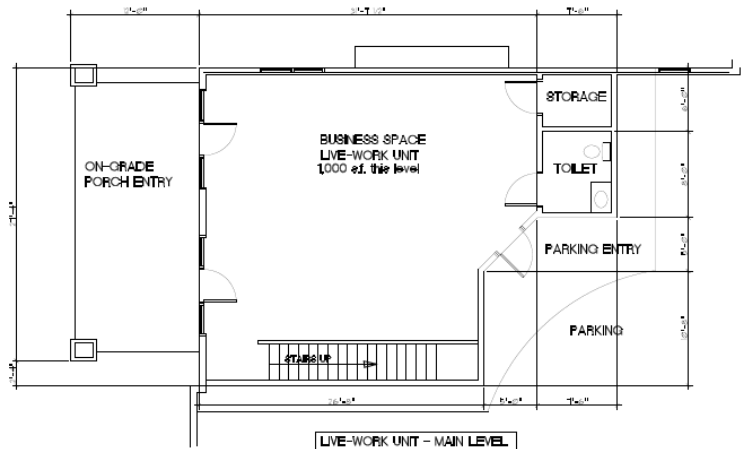
6720 South Apartment Access Road



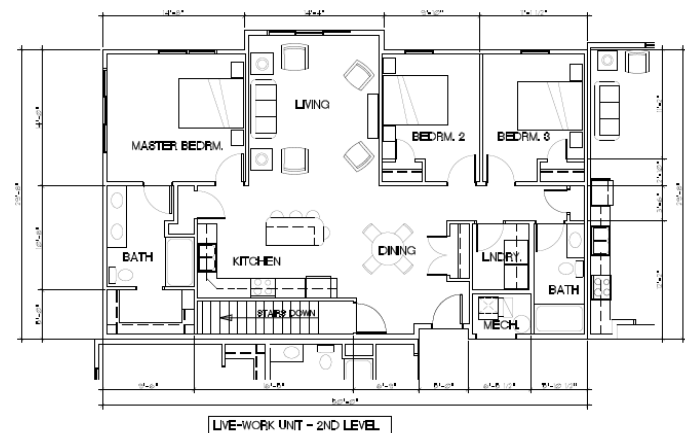
LIVE WORK UNIT DETAIL AND USES

- ICO has included 5 live-work units (two level) in the community for use as commercial space.
 - Live work units are two story units with a commercial space on the main floor, on grade with entrances from the parking structure as well as the building exterior. The second floor is designed to be commercial space and residential space.
 - Buildings A & B will have two live-work units each, and Building C will have one live-work unit
- ICO has not determined a full scope of permitted uses, but believes the most efficient and ideal use of the space would be for those with work-from-home occupations such as small scale services businesses, including: accounting, finance, consulting, programming, IT support, legal, etc.
- While the concept of live-work units may not be fully appreciated in this market, traffic and pollution have continued to increase in the Valley, these spaces have become desirable for residents who do not wish to travel to work.
- The community's parking ratio (1.8 stalls per unit vs. the required 1.2) will provide ample parking for clients / visitors, particularly during business hours when many residents will be at work or otherwise outside their apartment homes.

Live-Work Unit – Main Level



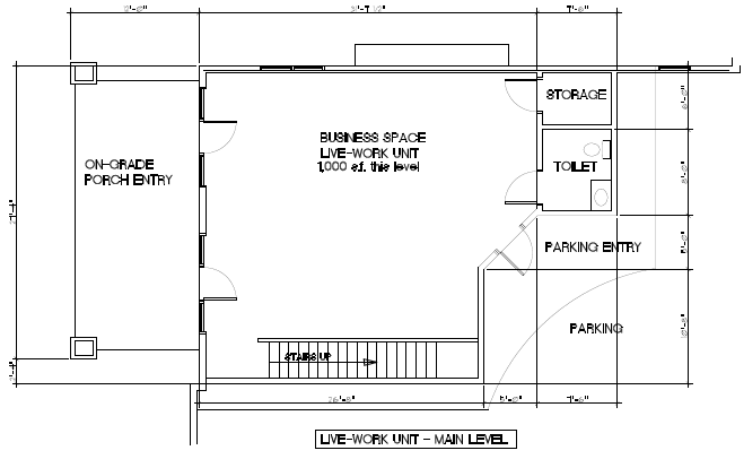
Live-Work Unit – Second Level



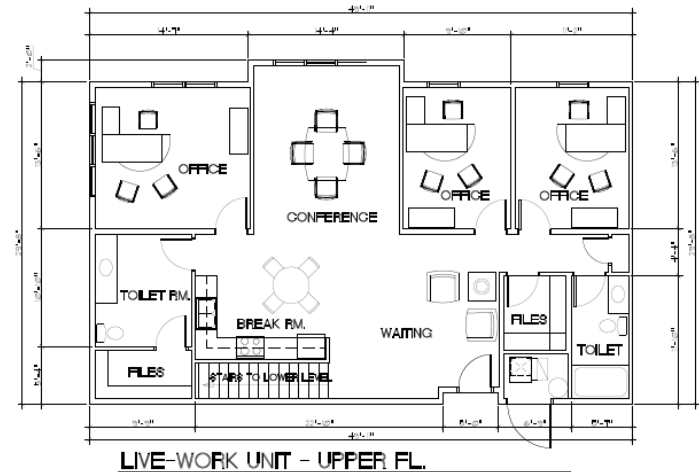
LIVE WORK UNIT DETAIL AND USES (CONT'D)

- ICO had its architect draft an illustrative alternative layout to demonstrate the flexibility of the space

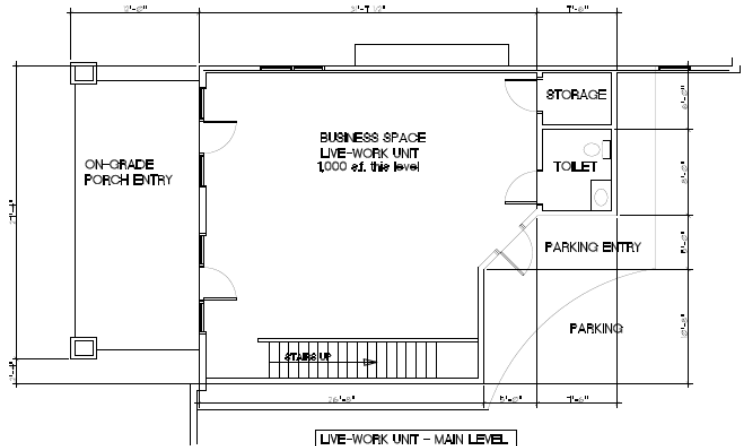
Live-Work Unit – Main Level



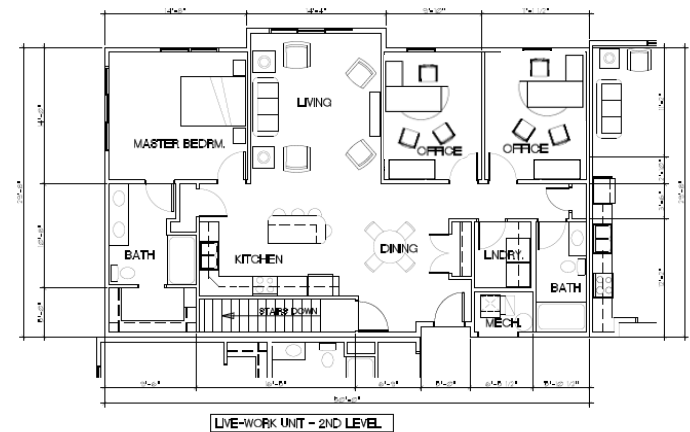
Live-Work Unit – Second Level – Working Space



Live-Work Unit – Main Level



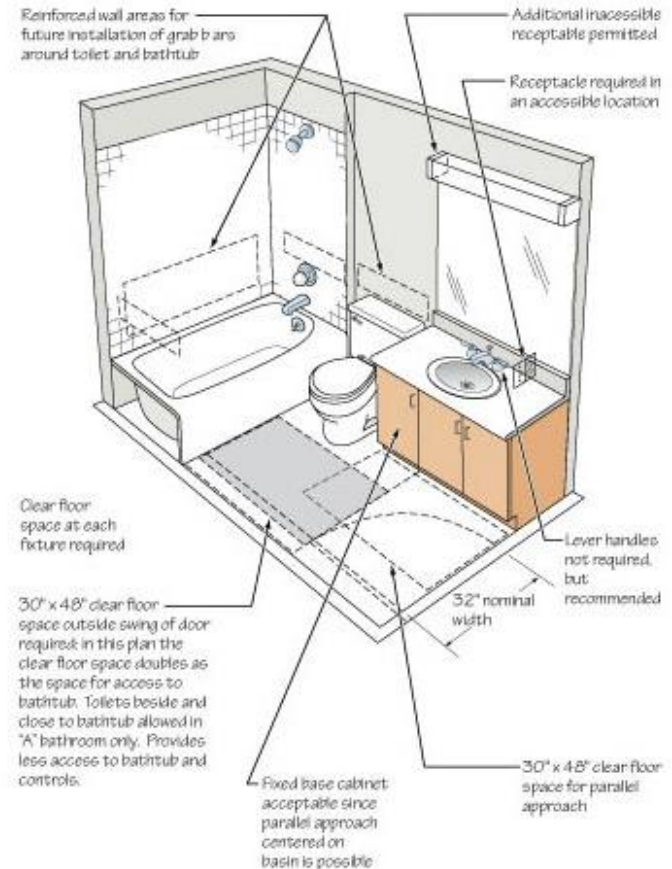
Live-Work Unit – Second Level – Mixed Use



SENIOR UNITS

- Zoning in the Planned Development District requires developments to include below market rate / senior / disabled housing units equal to at least 10% (subject to a threshold) of the total number of dwelling units contained within the zone.
 - To meet this requirement, ICO will include 21 senior units that will be fully ANSI Type B compliant
- Senior units will feature the following:
 - Entry room and doorway ADA compliant widths
 - ADA compliant bathroom grab bars
 - ADA compliant toilets
 - ADA clear space for turning radius clearance in kitchens, bathrooms and hallways
 - Ground floor or elevator access
 - Additional home automation features for security and interior climate control
 - Further, as these units cost more to develop, ICO will offer a 10% discount to qualified tenants so these units are in line with market rents for similar non-ANSI Type B compliant units within the development
- The term “senior” is defined as being 55 years of age or older, consistent with the federal Housing for Older Persons Act.
 - If ICO is unable to locate qualifying senior tenants after two months of active leasing, ICO can lease to individuals not meeting the age requirements, provided it must maintain a wait list of those individuals of 55 years or older desiring an ANSI Type B Compatible Unit with preference to rent a unit in the future.

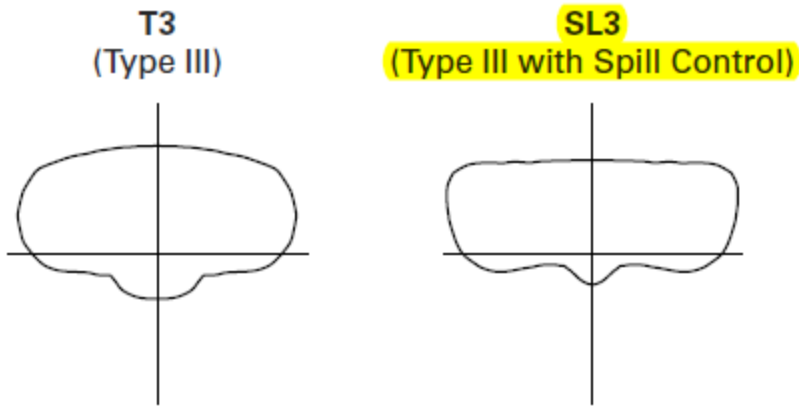
Illustrative ANSI Type B Bathroom



LIGHTING SUMMARY

- A photometric study was completed as a part of ICO's original application submission, including a concept photometric plan illustrating light levels across the site.
 - The study was completed using McGraw Edison – Galleon Fixtures on a 20' pole in the parking areas and Lumark Crosstour for building lights 10' off the ground.
 - For parking lighting, all poles are a type three distribution, so light is put more to the sides of the fixture rather than behind.
 - All pole fixtures utilize controlled LED optics to prevent light spill and house side shields can be added for additional light spill control.
 - The grid of numbers across the site show the foot-candle level measured at the ground (see next slide for detail).
 - The study demonstrates photometrics that are code compliant, but with ZERO foot-candles at the south property line, such that there is little to no light spill into the neighboring properties.
 - Building mounted fixtures for the photometric study were calculated at a height of 10' on the building; these fixtures provide enough light for the sidewalks but minimized forward throw of the light.
 - All fixtures are full cutoff and dark sky compliant.

20' Pole Asymmetric Area Distributions



- With a 20' buffer behind the parking lights, any light spill will be eliminated with spill control shields

Light Models Selected



**GLEON
GALLEON LED**

- Parking area lighting on 20' pole with directional shields added



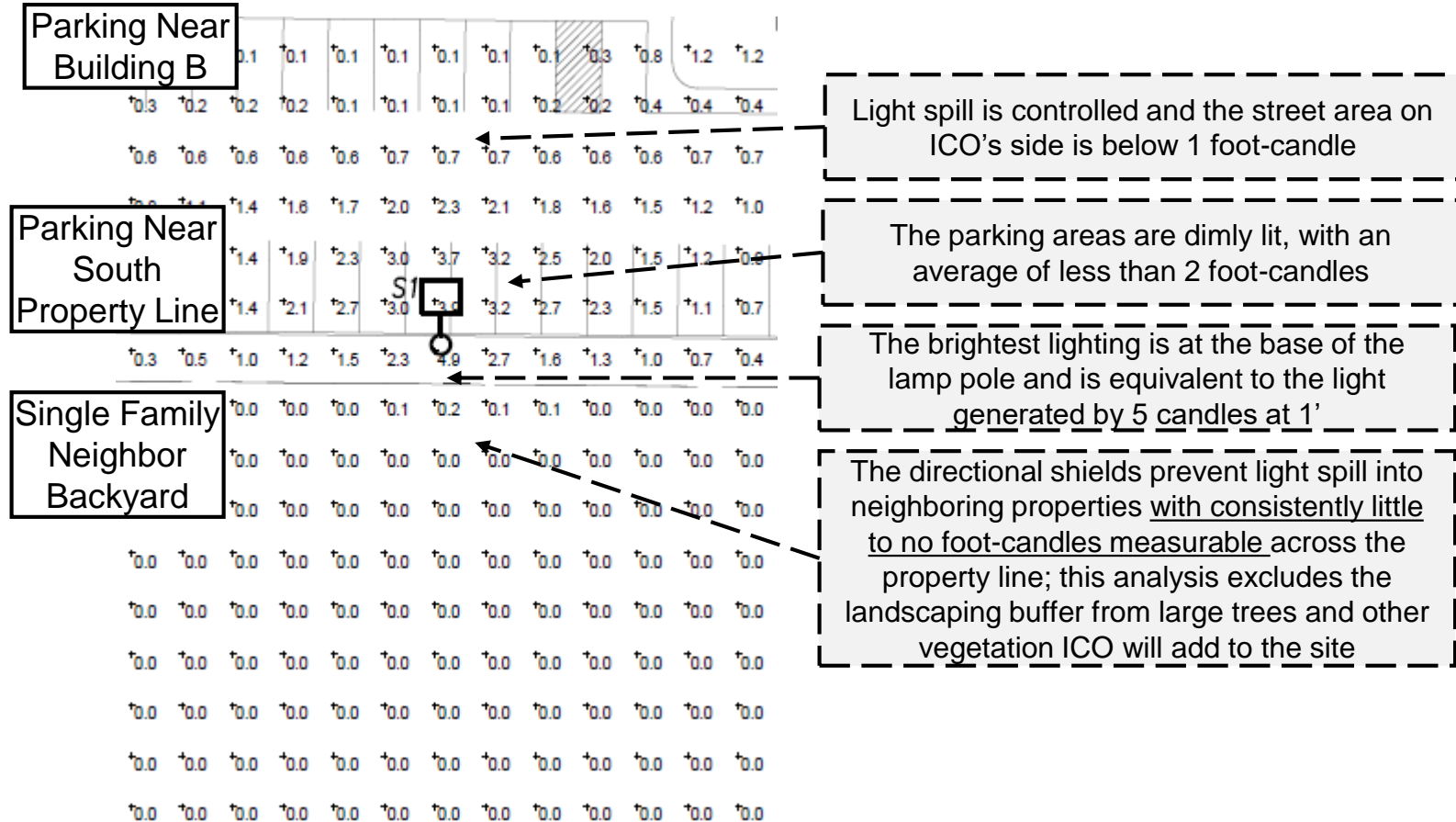
**XTOR
CROSSTOUR
MAXX LED**

- Directional building and sidewalk lighting

LIGHTING DETAIL

- One foot-candle is equivalent to the amount of light cast from one light candle onto an object at 1' distance
- The photometric study (portion shown below) illustrates the brightness of light as measured in foot candles on the ground across the site

Parking Lighting Details



- The submission package includes detailed information on the lighting fixtures selected.

BUILDING HEIGHT DETAIL

- The buildings are 50' tall with architectural elements up to 54'.
 - The ceiling of the upper floor is at 11'0", which allows for 10' high windows with transom windows above the patio doors.
 - The typical parapet height is 14' above the top level, which is only 3' above the ceiling height, which allows for a 30" deep roof truss and a 6" parapet.
 - The higher parapets are overbuild massing to provide architectural features and articulation of the roof massing. The heights of these elements are only 5' above the ceiling height of the top level to the flat box framed elements or to the truss bearing of the hipped roof features.

Building Height Details

